The opinion in support of the decision being entered today is *not* binding precedent of the Board.

### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

*Ex parte* JASON C. SHERMER AND MATTHEW J. HOLLAND

Application 10/072,435 Technology Center 1700

Decided: September 14, 2007

Before BRADLEY R. GARRIS, THOMAS A WALTZ, and PETER F. KRATZ, *Administrative Patent Judges*.

WALTZ, Administrative Patent Judge.

#### **DECISION ON APPEAL**

This is a decision on an appeal under 35 U.S.C. § 134 from the Primary Examiner's final rejection of claims 1-11 and 13-23, which are the only claims pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 6(b).

According to Appellants, the invention is directed a universal abrasive sheet comprising a sheet material having an abrasive material disposed on a

face and having a body portion and a tip portion, where the tip portion is separable from the body portion, the body portion is provided with a first configuration adapted to be used with a first platen, and the body portion has first segments defining regions of weakened material so that separation along these first segments will change the body configuration to correspond with a second platen configuration of different dimensions (Br. 2). Independent claim 1 is illustrative of the invention and a copy of this claim is reproduced below:

- 1. A universal abrasive sheet for use with alternative sanding or polishing machines having platens with different configurations, comprising:
- a sheet material having an abrasive material disposed on a face and having a body portion and a tip portion, said tip portion being separable from said body portion and defining a separate region of said sheet material relative to said body portion, the body portion being provided with a first configuration adapted to be used with a first platen configuration and having first segments defining regions of weakened material, wherein said sheet material is adapted to be separated along said first segments to change a configuration of said body portion of said sheet material to correspond with a second platen configuration having different external dimensions than said first configuration.

The Examiner has relied on the following prior art references as evidence of obviousness:

Simons	US 1,635,350	Jul. 12, 1927
Pearce	US 5,367,839	Nov. 29, 1994
Martin	US 6,045,887	Apr. 04, 2000

#### **ISSUE ON APPEAL**

Claims 1, 7-11, 13-17, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Martin in view of Simons (Answer 3).

Claims 2-6, 18-19, and 21-23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Martin in view of Simons and Pearce (*id.*).

Appellants contend that Martin fails to disclose configurations or regions of weakened material that can modify the abrasive sheet so that the sheet will correspond with different platens (Br. 10-11). Appellants also contend that Simons fails to disclose a first configuration of sandpaper for use with a first platen and separating the sandpaper along score lines 4 to provide the paper with a second configuration corresponding to a second platen (Br. 11).

Appellants contend that neither Martin, Simons, nor Pearce discloses or suggests multiple tip configurations of different shapes and sizes, while Pearce fails to disclose or suggest an abrasive sheet including a tip portion and second and third segments of weakened material (Br. 15-17; Reply Br. 3).

The Examiner contends that Simons teaches first segments defining regions of weakened material, where the sheet is adapted to be separated along the first segment to change the configuration of the body portion (Answer 3-4).

The Examiner contends that Pearce discloses a plurality of segments that define regions of weakened material where the sheet is adapted to be separated along two different segments to correspond with a plurality of sanding machines (Answer 5-6).

Accordingly, the issue presented from the record in this appeal is as follows: Does the combination of Martin, Simons, and Pearce disclose or suggest tip portions that are separable from the body portion as well as body

portions with weakened material allowing the body to be configured to fit different shapes or platens?

Based on the totality of this record, we determine that the Examiner has established a prima facie case of obviousness based on the reference evidence, which prima facie case has not been adequately rebutted by Appellants' arguments. Therefore, we AFFIRM both grounds of rejection presented in this appeal essentially for the reasons stated in the Answer, as well as those reasons set forth below.

#### **OPINION**

We determine the following Factual Findings from the record in this appeal:

- (1) Martin discloses an abrasive sheet for a sanding machine comprising a body portion and a tip portion with a working point, where the tip portion is defined by a weakened region so that the tip portion can be separated from the body portion, turned through an angle and re-positioned to provide a plurality of new working points for extended use (Abstract; Figs. 1-2; col. 1, l. 44-col. 2, l. 2; and col. 3, ll. 1-14);
- (2) Martin teaches that many hand-held electric sanders are well known, conventionally designed to carry rectangular sand paper sheets of quarter size, third size, or half size (col. 1, ll. 12-15);
- (3) Martin teaches that if the tip portion includes four working points, the tip portion is preferably substantially square but tip portions having two, three, five, six, seven, etc., working points alternatively can be employed (col. 2, ll. 3-4; and col. 3, ll. 26-28);

- (4) Simons discloses sand paper with divisional score lines so that pieces can be torn off leaving the remaining portions intact for future use (1:25-29 and 48-61);
- (5) Pearce discloses sand paper that can be used with several different models of sanding machine, with an array of punch-out holes arranged to correspond with the dust extraction devices of different sanding machines (Abstract; Fig. 1; col. 1, ll. 37-40 and 45-54; col. 2, ll. 15-20 and 50-62); and
- (6) Pearce teaches that the sand paper sheets may be provided in full-size sheets with separable or frangible perforated delineations dividing the sheet into the conventional one-third, one-half, or one-quarter sheet sizes (col. 3, ll. 28-37; see Fig. 4).

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations. *See Graham v. John Deere of Kansas City*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). "[A]nalysis [of whether the subject matter of a claim is obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007), *quoting In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336-37 (Fed. Cir. 2006); *see also In re Hoeschele*, 406 F.2d 1403, 1406-07, 160 USPQ 809, 811-12 (CCPA 1969) ("[I[t is proper to take into account not only

specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom..."). The analysis supporting obviousness should be made explicit, and where the combination of prior art involves more than a simple substitution of one known element for another or the mere application of a known technique to something ready for the improvement, the analysis should "identify a reason that would have prompted a person of ordinary skill in the art to combine the elements" in the manner claimed. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. at 1739, 82 USPQ2d at 1396.

Applying the preceding legal principles to the Factual Findings in the record of this appeal, we determine that the Examiner has established a prima facie case of obviousness, which prima facie case has not been adequately rebutted by Appellants' arguments. As shown by Factual Finding (1) listed above, we determine that Martin discloses an abrasive sheet with a body portion and a tip portion where the tip portion is separable from said body portion and defines a separate region of the sheet material relative to the body portion. Furthermore, as shown by Factual Finding (3) listed above, we determine that Martin would have suggested multiple tip configurations with different shapes and sizes.

As shown by Factual Finding (2) listed above, we determine that Martin teaches that it was well known in this art that hand held electric sanders have been designed to carry sandpaper sheets of quarter size, third size, or half size. As shown by Factual Finding (4) listed above, we determine that Simons teaches that it was known in the art to have sandpaper with regions of weakened material (score lines) so that sections of the paper

could be separated when worn, leaving a different configuration (exemplified as a quarter, half, or three-quarter size) of the body portion to be subsequently used. Accordingly, we determine that one of ordinary skill in this art would have used regions of weakened material (score lines or perforations) in a full-size sandpaper sheet to alter the configuration of the sheet to match any conventional quarter, third, or half-size sanding machine (and the corresponding platen). As further evidence of this determination, Pearce discloses sandpaper that can be used with different models of sanding machines, and teaches that full-size sheets may have separable or frangible perforated delineations that divide the sheet so that it can be configured to fit on the conventional quarter, third, or half-size sanding machines (*see* Factual Findings (5) and (6) listed above and Fig. 4 of Pearce).

For the foregoing reasons and those stated in the Answer, we determine that the configurations of both the body and tip portions would have been reasonably suggested to one of ordinary skill in this art by the applied prior art. Therefore, we AFFIRM both grounds of rejection present in this appeal. The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

## **AFFIRMED**

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